

4

Spark plugs for internal combustion engines Rudolf
Barta and Miloslav Bartuska (Chem. Technol. Fac.
Prague) *Porcelánová izolace* *Motorist*, Nov 1953, 647-650
(Pub. 1954) - The ceramic mass of the spark plugs should
preferably be a synthetic corundum which by the right
method of manuf. and machining can have elec. and mech.
qualities which make it superior to porcelain and suitable
for this purpose. 12 references. (Werner, J. G.)

4
1

BARTUSKA, M.

BARTUSKA, M. Microscopy of chinaware. p. 10.

Vol. 4, No. 1, Jan. 1954.

SKLAR A KERAMIK.

TECHNOLOGY

Praha, Czechoslovakia

So: East European Accessions, Vol. 5, No. 5, May 1956

"APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000203810004-3

12711 * Mr. [illegible] of [illegible]

Mr. [illegible]

APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000203810004-3"

BARTUSKA, M.; BARTA, R.; SPICAK, K.

Highly valuable dinas. p. 553.

(Hutnicke Listy, Vol. 11, no. 9, September 1956. Brno, Czechoslovakia)

SO: Monthly List of East European Accessions. (EEAL) LC. Vol. 6, No. 6,
June 1957. Uncl.

BARTUSKA, MIROSLAV.

15
4
✓ Microscopic evaluation of limestone for technological purposes. Miroslav Bartuska and Rudolf Barta (Vysoká škola chem. technol., Prague). *Sborník výsledků školy chem. technol. v Praze* 1957, 49-61. — On the basis of macro- and microstructure, mineralogical compn., and the way of inclusion of impurities, various kinds of limestone were classified with respect to the technol. properties and purposes.
M. Hudlický

"APPROVED FOR RELEASE: 06/06/2000

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Distr: 4E2o

JB
1/ Influence of alkali content on the properties of artificial white corundum for grinding purposes. Jaroslav Kredba, Miloslav Bartuska, Jan Hlavac, and Svanic Prochazka. Stihaly 2, 102-8(1958).—Alkali and CaO are concd. in the black upper parts of the molten corundum substance which gives rise to sealy crystals of β -corundum. An abrasive material contg. a substantial percentage of β -corundum has greater tendency to be splintered and abraded. Oscar Gylke

5
1
99

4
15
Silica from the high-pyritic quartz of Banaka. Belk.
Miroslav Bartuška and Otakar Vepřek. *Silický 2*, 169-73
1948. Silica having good technological qualities can be
produced, especially that with a high load test at high
temp. (1296°). Oscar Culpe.

AUTHOR : J. B. S. J. J. J.
 CATEGORY : Silicate Technology. Chemical Products and
 Their Uses. Part 2. Corrosion. Glass. Binding.*
 RES. JOUR. : RZKhim., No. 1 1960, No. 1073
 AUTHOR : Bartuska, M.
 INST. : Chair of Silicate Technology, Praha
 TITLE : Study of the Firing of Al_2O_3
 ORG. JOUR. : St. Maty, 1959, 3, No 2, 139-153
 ABSTRACT : The Chair of Silicate Technology (Praha, Cze-
 choslovakia) conducted a study of the influence
 of the additions of C.2, 1, 3, 6 and 10 at% of
 various oxides upon the firing of three vari-
 eties of Al_2O_3 , among which were: technical
 aluminum of Czechoslovakia, the same of Hun-
 gary, and fused corundum. The initial test
 *Materials. Concrete. Ceramics
 CITE: 1/6

4-30

COUNTRY	:		H
CATEGORY	:		
ABS. JOUR.	:	RZKhim., No. 1	1960, No. 1873
AUTHOR	:		
INST.	:		
TITLE	:		
ORIG. PUB.	:		
ABSTRACT	:	material was roasted at 1370° and ground in a	
cont'd	:	coll. mill until 70-93% of grains < 5 μ and	
	:	6-25% < 1 μ were obtained. The composites with	
	:	additions were mixed in wet planetary mixers,	
	:	dehydrated and pressed into tablets with the	
	:	addition of organic binding at 280 kg/cm ² . The	
	:	firing of the tablets was effected in an indus-	
	:	trial tunnel kiln at 1710° and in a laboratory	
	:	chamber furnace at 1450, 1600 and 1720°. The	
CARD:	:	2/6	

COUNTRY :
CATEGORY :

H

AES. JOUR. : RZKhim., No. 1 1960, No. 1873

AUTHOR :
INSTR. :
TITLE :

ORIG. PUB. :

ABSTRACT : water absorption and shrinkage were determined
cont'd for fired tablets and graphs were plotted in
relation to temperature and quantity of each
addition. According to the degree of the in-
fluence of additions upon the firing of Al_2O_3 ,
they can be divided into four groups, viz.:
a strong positive influence upon the firing
of Al_2O_3 is exerted by CrO , TiO_2 , V_2O_5 , ImC
and Fe_2O_3 ; a positive influence, by Li_2O , BeO ,

CARD: 3/6

K-31

COUNTRY	:	H
CATEGORY	:	
ABST. JOUR.	:	RZKhim., No. 1 1960, No. 1873
AUTHOR	:	
TITLE	:	
ORIG. PUB.	:	
ABSTRACT	:	HgO, CaO, ZnO, ZnO ₂ , PbO, Bi ₂ O ₃ , W ₂ O ₃ and CeO ₂ (SiO ₂); no influence was shown by Hg ₂ O, SnO, SnO ₂ and NiO; a negative influence was exerted by K ₂ O, BaO, BiO ₂ and Cr ₂ O ₃ . The influence of additions is expressed variously, viz.: a) formation of isomorphic hard solutions producing growth of the dimensions of the lattice; b) exchange of the Al ³⁺ ions by
REF:	:	1/6

COUNTRY : H
 CATEGORY :
 ABS. JOUR. : REKIM., No. 1 1960, No. 1073
 AUTHOR :
 INST. :
 TITLE :
 ORIG. PUB. :
 ABSTRACT : ions of low or high valence; c) formation of
 contind eutectic fusions with corrosion action upon
 Al_2O_3 or without it; d) formation of compounds
 of the spinel type which usually impede firing
 (for instance, $PbO \cdot Al_2O_3$, $BaO \cdot Al_2O_3$, etc).
 During the firing of two-component systems,
 usually a recrystallization of the firings
 occurs, which is connected with the mechanism
 of the action of additions, dimensions, and

CARD: 5/6

H-32

COUNTRY :
CATEGORY :

ABS. JOUR. : RZKhim., No. 1 1960, No. 1873

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : form of the initial crystals. The influence of
cont'd the additions was found to be similar for all
three varieties of Al_2O_3 .-- S. Glebov

CARD:

6/6

BARTUSKA, M.

"Use of ceramics in modern aviation." P. 145.

SKLAR A KERAMIK. (Ministerstvo lehkeho prumyslu). Praha, Czechoslovakia,
Vol. 9, No. 5, May 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 8,
August 1959.
Uncla.

BARTUSKA, M.

100 years history of a great machine plant. p. 323.

STROJIRENSTVI. (Ministerstvo tezkého strojirenství, Ministerstvo přesného strojirenství a Ministerstvo automobilového průmyslu a zemědělských strojů) Praha, Czechoslovakia. Vol. 9, no. 5, May 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, no. 10, Oct. 1959. Uncl.

COUNTRY	:	Czechoslovakia	H-13
CATEGORY	:		
ISS. JOUR.	:	RZKhim., No. 51960, No.	18681
AUTHOR	:	Bartuska, M.	
TITLE	:	Not given	
ABSTRACT	:	The Utilization of Ceramic Materials in the Modern Aviation Industry. II. Cermets in the Construction of Combustion Chambers, Nozzles, and Other*	
REF. PUB.	:	Sklar a Keramik, 9, No 6, 166-179 (1959)	
ABSTRACT	:	The most critical components of rocket motors are the linings of the combustion chamber and nozzle, which are subjected to temperatures of 2,200-4,000° when high energy fuels (ethyl alcohol + liquid air [LOX], hydrazine + fuming HNO ₃ , hydrazine + H ₂ O ₂ , gasoline + HNO ₃) are used. The lining (L) of the combustion chamber may be of one piece or assembled in several sections; the latter construction is preferable from the point of view of reducing thermal stresses in the cermets when the motor is	
CARD: 1/5		*Rocket Parts.	259

ORIGIN:	: Czechoslovakia	H-13
CATEGORY	:	
ABS. JOUR.	: RZKhim., No. 5 1960, No.	13651
AUTHOR	:	
TITLE	:	
ORIG. PUB.	:	
ABSTRACT	: in operation. Thus the strength of segmented nozzles is increased by a factor of 5-20 over that of single-unit construction nozzles. The L of nozzles is usually fabricated separately from the L of the combustion chambers and is formulated from harder and reliable [sic] materials. The space between the metallic skin of the rocket [sic] and the L of the chamber or nozzle is filled with lightweight refractory concrete or plaster, which act simultaneously as heat insulation and distribute the pressure from the escaping gases to the metallic	
NOTE:	2/5	

COUNTRY : Czechoslovakia
COUNTRY :

U-15

JOUR. : RZKhim., No. 5 1960, No.

19601

AUTHOR :
TITLE :
SUBJ :

CONF. SUB. :

ABSTRACT : skin. In recent years the following materials have been used in the L of combustion chambers and nozzles: (a) graphite coated on the inside (sic) with $MoSi_2$ (Battelle Memorial Institute, USA) or SiC ('Rockide C,' Norton, USA); (b) SiC coated with Si_3N_4 to which small amounts of the nitrides of Fe and Mn have been added (Niafrax A, Carborandum Co., or Crystolon N, Norton) (nozzles up to 50 x 10 cm are constructed in one piece from these materials); dense SiC , sp. gr 3.1-3.2, on a SiC case with

CONF: 5/5

260

COUNTRY:	: Czechoslovakia	H-13
CATEGORY	:	
ABS. JOUR.	: RZKhim., No. 5 1960, No.	18681
AUTHOR	:	
DATE	:	
FILE	:	
ORIG. PUB.	:	
ABSTRACT	: additions of up to 5% of other substances (preferably 1% Al) (prepared by hot pressing at 2,450-2,480° under a pressure of 700 kg/cm ²); (a) 2r, B ₄ , a hard metal-like material which exhibits high oxidation resistance but is very expensive; (c) BN, used in mixtures with Si ₃ N ₄ and cubic and hexagonal SiC (not pressing). The more important physical properties of new ceramic materials are listed. For the control of the internal rocket temperature within 10-30°, corundum coatings	
CARD:	4/5	

COUNTRY	:	Czechoslovakia	E-13
CATEGORY	:		
ISS. JOUR.	:	RZKhim., No. 5 1960, No.	10501
EDITOR	:		
TITLE	:		
ORIG. PUB.	:		
ABSTRACT	:	('Rockide A,' Norton) are applied externally to the metallic skin. Bearings for the rocket fuel pumps which are self-lubricating at temperatures up to 900° are made from the hard alloy (wt %): Ni 25, Mo 5, TiC 64, NbC 6. The launching pads are made from refractory concretes. For Part 1, see RZKhim, 1960, No 2, 5804. S. Glebov	
CARD: 5/5		261	

BARTUSKA, M.

Use of ceramics in modern aeronautics. Pt. 3. p. 203.

SKLAR A KERAMIK. (Ministerstvo spotrebnho prumyslu) Praha, Czechoslovakia,
Vol. 9, No. 7, July 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 11,
November 1959.

Uncl.

BARTA, Rudolf, prof., inz., doktor technických ved; BARTUSKA, Miloslav;
HLAVAC, Jan; PROCHAZKA, Svante

High-corundum materials for electric insulation and electronics. Sbor
chem tech no.3, part 1:425-431 '59.

1. Katedra technologie silikatu, Vysoka skola chemicko-technologicka,
Praha.

BARTUSKA, Miloslav

Electrical properties of corundum ceramics. Sbor chem tech no.3,
part 1:433-445 159.

1. Katedra technologie silikatu, Vysoka skola chemicko-technologicka,
Praha.

BARTUSKA, Miloslav

Microscopy of molten corundum. Sbor chem tech no.3, part 1:447-452
'59.

1, Katedra technologie silikatu, Vysoka skola chemicko-technologicka,
Praha.

BARTUSKA, M.

80351

Z/012/60/000/02/005/019

E073/E435

15.2210

AUTHOR: Miroslav Bartuška

TITLE: A Study of Some Reactions in the $\text{Li}_2\text{O}-\text{B}_2\text{O}_3-\text{Al}_2\text{O}_3$ System
Taking into Consideration the Sintering of Corundum in the
Presence of a Lithium-Borium Flux ✓

PERIODICAL: Silikáty, 1960, Nr 2, pp 147-164 + 2 plates

ABSTRACT: The sintering of Al_2O_3 in the presence of a liquid phase, by studying the reactions between Al_2O_3 and the aggressive lithium-borium flux. It was found that the flux prepared by the fusion of H_3BO_3 and Li_2CO_3 in the ratio of 58.1% B_2O_3 and 41.9% Li_2O melts from about 600°C upwards. The compound $2\text{B}_2\text{O}_3 \cdot 9\text{Al}_2\text{O}_3$ is formed in the temperature range 1200 to 1250°C by a reaction between H_3BO_3 and the fused Nr 500 corundum mixed in the ratio of 12.7% B_2O_3 and 87.3% Al_2O_3 . The compounds $\text{Li}_2\text{O} \cdot \text{Al}_2\text{O}_3$ and $\text{Li}_2\text{O} \cdot 5\text{Al}_2\text{O}_3$ are formed by a reaction of Li_2CO_3 with Nr 500 corundum mixed in the ratio of $\text{Li}_2\text{O} : \text{Al}_2\text{O}_3$ up to $\text{Li}_2\text{O} : 5\text{Al}_2\text{O}_3$. Evaporation of the lithium compound occurs during the reaction so that the ratio of the two components, as compared with the initial ratio, shifts towards spinel composition. After firing ✓

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E073/E435

A Study of Some Reactions in the $\text{Li}_2\text{O}-\text{B}_2\text{O}_3-\text{Al}_2\text{O}_3$ System Taking into
Consideration the Sintering of Corundum in the Presence of a
Lithium-Borium Flux

at 1400°C , the mixture prepared in the $\text{Li}_2\text{O}:\text{Al}_2\text{O}_3$ ratio contains about 50 to 60% $\text{Li}_2\text{O} \cdot \text{Al}_2\text{O}_3$, 30% spinel and traces of corundum. On the other hand, the mixture prepared in the spinel ratio contains only 70 to 80% of spinel, the rest being composed of non-reacted Al_2O_3 . The spinel formation and recrystallization is favourably influenced by the presence of F ions. Spinel is formed partly from its components and partly by the secondary reaction between the primarily formed $\text{Li}_2\text{O} \cdot \text{Al}_2\text{O}_3$ and the free Al_2O_3 . In the ternary $\text{Li}_2\text{O}-\text{B}_2\text{O}_3-\text{Al}_2\text{O}_3$ system consisting of 80% of Nr 320 or 500 corundum and of 20% lithium-boron melt, i.e. of about 80% Al_2O_3 , 11.6% B_2O_3 and 8.4% Li_2O , the spinel $\text{Li}_2\text{O} \cdot 5\text{Al}_2\text{O}_3$ is formed at substantially lower temperatures than in the binary $\text{Li}_2\text{O}-\text{Al}_2\text{O}_3$ system. Spinel was found in pressed samples by means of X-rays after a one-hour heating at 650°C . The main part of spinel is formed between 700 and 800°C and the reaction is completed

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A Study of Some Reactions in the $\text{Li}_2\text{O}-\text{B}_2\text{O}_3-\text{Al}_2\text{O}_3$ System Taking into Consideration the Sintering of Corundum in the Presence of a Lithium-Borium Flux

quantitatively on reaching the temperature of 1000°C . A small quantity of $2\text{B}_2\text{O}_3 \cdot 9\text{Al}_2\text{O}_3$ is formed as a by-product at temperatures above 900°C . The spinel formation is accompanied by a volume increase which, in pressed samples, takes place in the temperature range of 620 to 750°C . In less dense, lightly compacted samples, spinel forms only at higher temperatures; this is due to inadequate contact between the reacting components. On the DTA curve, the spinel formation is indicated by an appreciable endothermic effect between 755 and 890°C with a pronounced minimum at about 800°C ; on the ETA curve, it is indicated by a change in the electrical conductivity between 810 and 950°C . Quantitative spinel formation at lower temperatures, even in cases of rapid temperature raise, was proved to be due to the presence of B_2O_3 ; in combination with Li_2O it forms a very aggressive flux which dissolves corundum in the first stage. The composition of the flux is changed while the

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A Study of Some Reactions in the $\text{Li}_2\text{O}-\text{B}_2\text{O}_3-\text{Al}_2\text{O}_3$ System Taking into Consideration the Sintering of Corundum in the Presence of a Lithium-Borium Flux

spinel is formed but the residual liquid phase probably influences favourably the sintering and the extensive recrystallization of spinel which takes place in the second stage. This reaction is indicated on the DTA curve of a lightly compacted sample by a wide exothermal peak between 900 and 1030°C with a maximum at 955 to 990°C. Due to the above mentioned reasons, samples compacted at a pressure of 1130 kg/cm² sinter at temperatures about 150°C lower than those compacted at lower pressures; this is confirmed by the substantial volume contraction on the dilatometric curve in the temperature range 750 to 890°C. A sharp endothermic reverse effect on the DTA curve with a minimum at 1260 to 1285°C and a maximum between 1220 and 1237°C during cooling, indicates the presence of spinel; the intensity of this effect increases with the quantity of spinel present. Although the reacting mixture of 20% flux and 80% corundum comprises microscopically

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E073/E435

A Study of Some Reactions in the $\text{Li}_2\text{O}-\text{B}_2\text{O}_3-\text{Al}_2\text{O}_3$ System Taking into Consideration the Sintering of Corundum in the Presence of a Lithium-Borium Flux

visible pores after heating to 1000 to 1400°C, the substance between the pores is perfectly sintered. Spinel is formed in hypidiomorphic crystals free of pseudomorphoses of primary corundum. The study of the reaction between Al_2O_3 and the lithium-borium flux clearly indicates that the $\text{Li}_2\text{O}-\text{B}_2\text{O}_3-\text{Al}_2\text{O}_3$ system is not suitable as a model for the study of sintering in the presence of fluxes, this being due to the simultaneous occurrence not only of thorough wetting and intensive dissolution of the solid material but also of a chemical reaction between corundum and the flux, resulting in the formation of the lithium spinel $\text{Li}_2\text{O} \cdot 5\text{Al}_2\text{O}_3$. There are 26 figures, 1 table and 12 references, 7 of which are English, 2 German, 1 Soviet, 1 French and 1 Czech. ✓

SUBMITTED: August 28, 1959

Card 5/5

Z/012/61/000/001/003/003
E112/E435

AUTHORS: Bartuška, Miloslav and Hlaváč, Jan

TITLE: Microscopic Study of the Sintering of Al_2O_3

PERIODICAL: Silikáty, 1961, No.1, pp.59-61

TEXT: The paper describes the preparation and properties of 2 - 20 micron spheres of Al_2O_3 , used as model substances for the study of sintering phenomena. A white, fused corundum with 99.5% Al_2O_3 was heated in a standard Verneuil furnace by means of a hydrogen-oxygen flame and the corundum particles which fused into spheres were collected in a container filled with water. The spherical corundum particles retained their shape on cooling. X-ray analysis revealed that as a result of comparatively rapid cooling, Al_2O_3 had been transformed into its low-temperature isotropic modification, very similar to the γ -modification, which on heating to a suitable temperature, changes to the α -form. Photomicrograms are shown, indicating a small proportion of the α -modification in the prepared specimen (400x magnification, sporadic light particles). The specimen had a specific weight = 3.74, which is slightly less than α - Al_2O_3 and more than γ - Al_2O_3 .
Card 1/2

Microscopic Study of ...

Z/012/61/000/001/003/003
E112/E435

Sintering of the model substance was followed microscopically. Slight changes were noticed on reaching 1350°C; the originally smooth surface of the spheres showed a slight roughening. The character of the spheres remained unchanged on heating to 1500°C, the powder particles did not weld together. Interface growth was noticed on reaching 1750°C. Increase of temperature was followed by rapid interface increase; the pores filled in and ultimately they disappeared completely. The process was accompanied by a pronounced deformation of the original spheroids. Deformation was not concomitant with recrystallization. The individual components of the compact were still identifiable by microscope even after complete welding. There are 15 figures (9 photomicrograms of sintered Al₂O₃ spheres; Debyeagram of low-temperature modification of Al₂O₃; Debyeagram of Al₂O₃ after conversion to α-modification; Differential thermal analysis graph of low-temperature modification of Al₂O₃), and 8 references: 1 Soviet and 7 non-Soviet.

ASSOCIATION: VŠCHT, Praha (VŠCHT, Prague)

SUBMITTED: June 10, 1960

Card 2/2

BARTUSKA, Miloslav; BATRAKOV, Nikolaĭ A.

Examination of substances in the system $\text{ZnO}_2\text{-ZrO}_2$. Silikaty 6
no.4:341-351 '62.

1. Vysoka skola chemicko-technologicka, Katedra technologie
silikatu, Praha.

BARTUSKA, Miloslav

Aluminiferous corundum stones. Epitoanyag 14 no.12:456-462
D '62.

1. Pragai Kemiai-Muszaki Foiskola.

S/081/62/000/015/015/038
B168/B101

AUTHOR: Bartuška, M.

TITLE: Corundum refractories

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 15, 1962, 380, abstract
15K241 (Stavivo, v. 40, no. 2, 1962, 51-57)

TEXT: The properties of corundum materials were investigated as regards
the influence on them of the grain composition and properties of Al_2O_3 ,
the molding pressure and the mineralizers used. A method of producing
highly refractory materials with volume constancy was developed.
[Abstracter's note: Complete translation.]

Card 1/1

BARTUSHKA, Miloslav; BATRAKOV, N.A.

Study of the properties of sinters in the system zinc oxide
zirconium dioxide. Zhur. prikl. khim. 36 no.4:724-730 Ap '63.
(MIRA 16:7)

(Zinc oxide) (Zirconium oxides)
(Ceramic materials)

BARTUSKA, M., inz., ScC.

Baking of fireproof materials in rotary furnaces with external heat exchangers. Stavivo 41 no. 3:185-186 My '63

BARTUSKA, M., ins., C.So.

Highly clayey nonshrinking rammed materials. Stavivo 41 no.2:72-74
F '63.

BARTUSKA, M., inz., C.So.

State of production of carborundum refractory materials and methods
of increasing their quality. Stavivo 41 no.2:74-75 F '63.

BARTUSKA, M., inz. CSc.

Is it possible to foresee new fireproof substances? Staviva
42 no.4&157-158 Ap '64

BARTUSKA. M., inz. CSc.

Effect of texture and porousness on the thermal conductivity of
light corundum. Stavivo 42 no.5:194-195 My '64.

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ACCESSION NR: AP4047645

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Card 1/2

APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000203810004-3"

ASSOCIATION: Katedra technologie silikatu, Vysoka skola chemicko-technologicka,
Prague (Department of Silicate Technology, Higher School of Chemical Technology)

BARTUSKA, M., inz. CSc.

Firing of firebrick lean clay under turbulent conditions. Stavivo
42 no.10:392 0 '64.

BARTUSKA, Miloslav, inz. CSc.

"Examination of the $Al_2O_3 \cdot SiO_2$ type minerals as raw materials for fireproof products" ³ by ²[prof. dr.] H.B. Schwiete, [dr.] H. Müller-Hesse, [inz.] E. Wilkendorf. Reviewed by Miloslav Bartuska. Sklar a keramik 14, no.10:Suppl: insert 0 '64.

1. Chair of Silicate Technology of the Higher School of Chemical Technology, Prague.

HARTUSKA, M., inz. CSc.

Large molded bricks from zirconium oxide resistant to temperature changes. Stavivo 42 no.11:435-436 H '64.

BARTUSKA, M., inz.

Increasing fireclay resistance to temperature changes. Stavia
43 no.1:34-36 '65.

L 34184-66 EWP(t)/ETI IJP(c) JD/WW/JG/WH

ACC NR: AP6026059

SOURCE CODE: GE/0005/66/000/002/0035/0040

AUTHOR: Bartuska, Miloslav--Bartushka, M.

ORG: Department of Silicate Technology, University for Chemical Technology,
Prague, Czechoslovakia

TITLE: Problems in the stabilization and sintering of zirconia. ²⁷ Part 1 [This paper
was presented at the 1st International Meeting on Construction Materials and Silicate
held in Weimar from 3 to 7 November 1964.]

SOURCE: Silikattechnik, no. 2, 1966, 35-40

TOPIC TAGS: sintering, zirconium compound

ABSTRACT: The effect of degree of stabilization on the sintering of zirconia, the effect of the stabilizer on the sintering of zirconia⁵ and volume changes during the sintering of zirconia were investigated. Calcium zirconate forms first if calcium carbonate is used in the sintering; its formation is associated with loosening of the structure. By replacing the calcium carbonate with calcium zirconate, the structure improves and further processing becomes easier. Another means for improving the structure of the product is by employing a double-firing procedure followed by grinding to a fine particle size. NiO and/or ZnO, capable of forming a liquid phase with zirconia, favorably influence the sintering process when used as additives. Orig. art. has: 10 figures and 2 tables. [JPRS: 35,328]

SUB CODE: 13, 11 / SUM DATE: none

Card 1/1 BLG

UDC: 666.764.2.041.9

ACCESSION NR: AP4053428

Z/0055/64/014/004/0232/0284

AUTHOR: Bartuska, P.

TITLE: Recrystallization curves of nickel

SOURCE: Chekhoslovatskiy fizicheskiy zhurnal, v. 14, no. 4, 1964, 282-284, 236c

TOPIC TAGS: nickel, recrystallization, recrystallization kinetics, recrystallization curve, nickel recrystallization

ABSTRACT: A letter to the editor reports results of employing transmission electron microscopy to determine recrystallization curves of nickel, thereby obviating determination of microhardness and inferring the recrystallization rate -- annealing temperature curve from the shape of the microhardness--annealing time curve. Samples of 99.95% purity were deformed to 90% (thickness, 0.05 mm), heated to 500 C in a sodium nitrate bath, electrolytically polished, and then observed in a Siemens Elmiskop I electron microscope (magnification, 5000 X) at 100 kv. The incubation period for 4- μ grains was 20 seconds; with optical microscopes the first nuclei were observed after as much as 60 seconds. The difference in resolution between optical and electron microscopy was especially pronounced at low temperatures and when the recrystallized part of the same

Card 1/2

ACCESSION NR: AP4033428

approached 100%; the individual polygonized regions could no longer be found optically after 120 minutes of annealing nor electronically after 290. The diameter of the polygonized regions was about 2-5 μ , and the polygonized regions after more than 250 minutes annealing comprised 10⁻³ to 10⁻⁴%. The persistence of polygonization is attributed to unsuitable orientation of the remainder of the polygonized matrix with respect to the growing grains. Such regions were found inside the grain (encounter at beginning of growth) and, more usually, between two or more grains. A plot of V_T versus annealing time at 500 C is given which shows that the former increases roughly from 0 to 75% after ten minutes, and from 75 to 98% after 65 minutes, then levelling out at about 99% over the remainder of the annealing period (end of recrystallization, about 290 minutes). "The author would like to thank Dr. M. Rozsival, head of the laboratory of electron microscopy of the Institute of Solid State Physics, for his help in this work and Dr K. Misek for interest in the problem." Orig. art. has: 2 figures.

ASSOCIATION: Inst. of Solid State Phys., Czech Acad. Sci., Prague

SUBMITTED: 26Oct63

DATE ACQ: 01May64

ENCL: 00

SUB CODE: S5

NO REF SOV: 003

OTHER: 017

Card 2/2

BARTUSKA, Pavel

Electron microscopic examination of the substructure of polycrystalline nickel deformed by 5 to 97.5 per cent. Cs cas fys 14 no. 4:303-311 '64.

1. Institute of Solid State Physics, Czechoslovak Academy of Sciences, Prague.

BARTUSKA, P.

Dependence of cell size on degree of deformation in polycrystalline nickel. Chekhosl fiz zhurnal 14 no.5: 378-379 '64.

1. Institute of Solid State Physics, Czechoslovak Academy of Sciences, Prague 6, Cukrovarnicka 10.

"APPROVED FOR RELEASE: 06/06/2000

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APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000203810004-3"

BARTUSKA, P.

A contribution to the study of nucleation during the recrystallization of strongly deformed polycrystalline nickel. Czechoslovak Journal of Physics 14 no.3:654-655 1964

1. Institute of Solid State Physics, Czechoslovak Academy of Sciences, Prague 6, Sukbátarova 15.

SECRET

1. The following information was obtained from a source who has provided reliable information in the past.

2. The source has provided information that is reliable and accurate.

L 20582-66 BWP(t) IJP(e) JD/JW/HW

ACC NR: AP6000660

SOURCE CODE: CZ/0055/65/015/009/0678/0685

AUTHOR: Bartuska, P.

ORG: Institute of Solid State Physics, Czechosl. Acad. Sci., Prague

TITLE: Establishment of activation energy of subgrain growth in strongly deformed polycrystalline nickel

SOURCE: Chekhoslovatskiy fizicheskiy zhurnal, v. 15, no. 9, 1965, 678-685

TOPIC TAGS: polycrystal, nickel containing alloy, activation energy, crystal deformation, deformation rate, high temperature effect, annealing

ABSTRACT: The measurement of the subgrain size of nickel with a purity of 99.80% after deforming to 97.5% and annealing up to 200, 400, 450, and 500C was carried out. It was ascertained that the following relation holds in the temperature interval 400—500C:

$$\log t = \Delta E / 2.3R \times 1/T + \log B.$$

where t is the annealing time for which the subgrain size grows to a certain value, T is the absolute temperature, R is the gas constant, ΔE is the activation energy of subgrain growth, and B is a constant. The value $\Delta E = 50$ kcal/mol was found for this temperature range. The Card 1/2

L 20582-66

ACC NR: AP6000660

author thanks Dr. K. Misek and Engineer J. Lasek for reading the manuscript and J. Vrtilkova for helping in the experimental work. art. has: 7 figures and 2 tables. [Based on author's abstract] Orig. [NT]

SUB CODE: 20/ SUBM DATE: 23Oct64/ ORIG REF: 004/ OTH REF: 014/
SOV REF: 006

Cord 2/2 BK

migration of their boundaries, in steps on the order of 1μ . In detail the subgrains whose "nuclei" were observed in the deformed material grew first. Such a nucleus, with diffusion subboundaries, was always found before a perfect subgrain

L 34765-66 EMP(t)/ETI IJP(c) JD/HW

ACC NR: AP6026277

SOURCE CODE: CZ/0037/65/000/004/0295/0303

AUTHOR: Bartuska, Pavel

ORG: Institute of Solid State Physics, CSAV, Prague (Ustav fyziky pevných látek CSAV)

TITLE: Contribution to the study of the polygonization of nickel

SOURCE: Ceskoslovensky casopis pro fysiku, no. 4, 1965, 295-303

TOPIC TAGS: polygonometry, annealing, nickel, metal deformation

ABSTRACT: The paper describes the measurement of the subgrain size of Ni specimens 99.80% pure. It was found that the relation of subgrain size and annealing period at a constant temperature and deformation has an exponential shape and is represented by a straight line on a semi-log chart. The author thanks Doctor, Candidate of Sciences K. Mizek for help with this problem and Engineer L. Smrcek as well as the other workers of the Section of Metal Physics, UFPL, for valuable suggestions. The author also thanks J. Vrtilek for assistance with the experimental work. Orig. art. has: 3 figures, 2 formulas and 1 table. [Based on author's Eng. abst.] [JPRS]

SUB CODE: 20, 13, 12 / SUBM DATE: 28May64 / ORIG REF: 002 / SOV REF: 007
OTH REF: 026

KROTOV, V. Yu.; BARTUSYAVICHENE, A.S. [Bartusiavičenes, A.S.]

Report on the activity of the Vilnius Society of Roentgenologists
and Radiologists in 1960. Vest.rent.i rad. 36 no.3:75 My-Je '61.
(MIRA 14:7)

1. Predsedatel' pravleniya Vil'nyusskogo gorodskogo nauchnogo
obshchestva rentgenologov i radiologov (for Krotov). 2. Sekretar'
pravleniya Vil'nyusskogo gorodskogo nauchnogo obshchestva rent-
genologov i radiologov (for Bartusyavichene).
(VILNIUS—RADIOLOGICAL SOCIETIES)

STRAUB, F. Bruno; ERNST, Jeno; JUVANCZ, Ireneus; BALOGH, Janos;
SZENTAGOTHAJ, Janos, dr.; TORO, Imre, dr.; BALINT, Andor;
BARTUSZ, Lajos

An account of the 1962 work made by the directorate of the
Biological Section. Biol tud kozl MTA 5 no.3-4:165-202 '62.

1. "A Magyar Tudományos Akademia Biologiai Tudományok Osztálya-
nak Közleményei" szerkesztője (for Straub). 2. "A Magyar
Tudományos Akademia Biologiai Tudományok Osztályának
Közleményei" szerkesztő bizottsági tagja (for Szentagotai
and Toro).

↓

PARTYKIAN, A. L. D.

"Agrophysical Characteristics of Certain 'G. are' Soils of Dagestan ASSR." Sub 9 May 51, Soil Inst, Acad Sci USSR.

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

BARTYNOWSKA, J.; FIDELUS, J.

Investigations on the susceptibility of *Drosophila melanogaster* to azotox (DDT). *Bul Ac Pol biol* 8 no.7:305-310 '60. (EEAI 10:4)

1. Department of Experimental Evolution and Animal Genetics,
Jagellonian University, Cracow. Presented by T. Marchlewski.
(*DROSOPHILA MELANOGASTER*)
(TRICHLOROBISCHLOROPHENYLETHANE)

BARTYNOWSKA, Jadwiga; F. DOLINSKI, Jan

Studies on the susceptibility of the larvae and pupae of *Drosophila melanogaster* to Azotox. Prace zool no.6:73-80 '62.

1. Institute of Animal Genetics, Jagiellonian University, Krakow. Head: Prof. dr. T. Marchlewski [deceased].

BARTYS, Julian

An unknown critical memorandum by A. Auleitner to the Government on the state of forests and forest services of 1862. Sylwan 56 no.1:29-46 Ja-F '62.

... ..,,

DB-2-59 universal stereotaxic device (2d model). Biul. eksp. biol. i
med. 51 no.5:113-115 My '61. (MIRA 14:8)

1. Iz Instituta normal'noy i patologicheskoy fiziologii (dir. -
deystvitel'nyy chlen AMN SSSR V.V.Parin) AMN SSSR, Moskva. Predstavlena
deystvitel'nyy chlenom AMN SSSR V.V.Parinym.
(PHYSIOLOGICAL APPARATUS)

SUSZKO, J.; BARTZ, J.; WIEWIORSKI, M.

Investigations on the properties of hydroxylupanine. Bul chim PAN 8
no.2:41-44 '60. (KRAI 10:9/10)

1. Department of Organic Synthesis, Polish Academy of Sciences,
Laboratory No. 5 and Department of Organic Chemistry, A. Mickiewicza
University, Poznan. Presented by J. Suszko.

(Lupanine) (Hydroxy group)

BARTZ, J.

Investigations on disubstituted naphthalene derivatives. I. The positions amphi in the naphthalene molecule. II. The positions 2,3 - in the naphthalene molecule. Bul chim PAN 8 no.4:147-153 '60.
(KEAI 10:9/10)

1. Katedra Chemii Organicznej, im. A. Mickiewicza, Poznan. Pracownia Nr. 5. Zaklad Syntezy Organicznej, PAN. Presented by J. Suszko.

(Naphthalene derivatives)

SUSZKO, J.; BARTZ, J.; BRATEK, M. D.; WIEWIORSKI, M.

New methods of isolation of alkaloids from lupine seeds. Bul chim
PAN 8 no.2:45-47 '60. (EEAI 10:9/10)

1. Department of Organic Synthesis, Polish Academy of Sciences,
Laboratory No. 5 and Department of Organic Chemistry, A. Mickiewicz
University, Poznan.

(Alkaloids) (Lupine)

44349

P/512/62/000/006/001/003

E071/E436

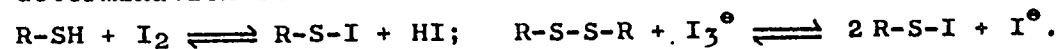
27.11.20

AUTHORS: Bartz Jan, Kurzawa Zbigniew

TITLE: The utilization of an induced iodine-azide reaction for the investigation of changes in sulphur aminoacids under the influence of ultraviolet light

SOURCE: Poznan. Uniwersytet. Zeszyty naukowe. no.40. Matematyka, fizyka, chemia. no.6. 1962. 3-11

TEXT: The investigation was carried out in order to study changes in cystine and cysteine in solutions under the influence of ultraviolet light using iodine-azide induced reaction for the determination of the above aminoacids. f



In acid solutions $\text{R-S-I} + \text{N}_3^\bullet \longrightarrow \text{R-S-N}_3 + \text{I}^\bullet$, the R-S-N_3 formed reacts with I-N_3 (formed in acid solution):

$\text{R-S-N}_3 + \text{I-N}_3 \longrightarrow \text{R-S-I} + 3 \text{N}_2$, the reaction continues until, due to side reactions, the mercaptan is irreversibly oxidized, e.g. to sulphonic acid which does not induce this reaction.

Card 1/3

The utilization of an induced ...

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E071/E436

Irradiated solutions of cystine at pH 8 become yellow. Samples analysed in the course of irradiation indicated that the amount of cystine decreases while the amount of cysteine increases, attaining in time (3 to 5 hours) a constant value of about 30%. Simultaneous decrease in cystine was higher than the amount of cysteine formed. The latter indicated the formation of another substance, probably cysteic acid which does not induce iodine-azide reaction. Beginning from the 5th hour of the irradiation, an equilibrium between the sum of cysteic acid and cystine and cysteine became established. During the reaction some decrease in pH (0.2 to 0.4 units) was observed, indicating the appearance of a stronger, probably sulphonic, acid. The results obtained on irradiation of a solution of the mixture of cysteine and cystine in the ratio of 1:3 indicated that the original level of cysteine is maintained, while that of cystine decreased. On irradiation of a solution containing only cysteine, the formation of cystine and a decrease in cysteine was observed, whereupon the level of cysteine stabilizes at a value of 28% of the original concentration. On irradiation of cystine in acid solutions (pH 2 to 5) the

f

Card 2/3

The utilization of an induced ...

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E071/E436

precipitation of colloidal sulphur takes place. The formation of H_2S as an intermediate product was observed. The precipitation of sulphur can be prevented by the addition of formaline. There are 4 figures.

ASSOCIATIONS: Katedra chemii organicznej uniwersytetu im.
A. Mickiewicza (Department of Organic Chemistry of
the University imeni A. Mickiewicz)
Katedra chemii ogólnej politechniki Poznańskiej
(Department of General Chemistry of the Poznan
Polytechnic Institute)

Card 3/3

WIEWIOROWSKI, M.; PARTEZ, J.; WYSOCKA, W.

Lupin alkaloids. On the composition of the high-boiling fraction of *Lupinus albus* alkaloids. *Bul chim PAN* 9 no.11:715-719 '61.

1. Department of Organic Chemistry, A.Mickiewicz University, Poznan Institute of Biochemistry and Biophysics, Poznan Branch, Polish Academy of Sciences. Presented by J. Suszko.

WIEWIOROWSKI, M.; FELISHER, W.; BARKER, C.

Lupin alkaloids. On the structure of Beckel's "etoxylupanine".
Bul chim PAN 9 no.11:721-724 '61.

1. Department of General Chemistry, School of Economics, Poznan
and Department of Organic Chemistry, A. Mickiewicz University,
Poznan. Presented by J. Suszko.

BARTZ, Jan; Kozłowska, J.

Utilization of induced iodine-amine reaction in studies on the effect of ultraviolet radiation on sulfur-containing amino acids. Mat chemia no.6:3-11 1962.

1. Katedra Chemia Organicznej, Uniwersytet im. Adama Mickiewicza, Poznan i Katedra Chemii Ogolnej, Politechnika, Poznan.

Studia nad modyfikacją medium
Lyszan, 1964, 1965

Studies on a modified HS medium used in sterility control of biological preparations. Med. dosw. mikrobiol. 16 no.2:155-159 '64.

1. Z Instytutu Hematologii w Warszawie (Dyrektor: doc. dr. A. Trojanowski) i z Wojsk. Stacji Krwiodawstwa w Poznaniu (Dyrektor: dr. H. Gerwelowa).

BLINOVA, A.M.,; BARTYZEL', A.I.

Cannula for the determination of lateral pressure in arteries,
vein, venous sinuses, and subdural space. Biul. eksp. biol i
med. 41 no.2:77-78 F '56 (MLRA 9:6)

1. Iz laboratorii fiziologii i patologii dykhaniya i krovooobrazheniya
(sav.-prof. M.Ye. Marshak) Instituta fiziologii (dir.-deystvitel'nyy
chlen AMN SSSR prof. V.N. Chernigovskiy) AMN SSSR, Moskva.
Predstavlena deystvitel'nyy chlenom AMN SSSR V.N. Chernigovskim.

(MANOMETER,

cannula for determ. of lateral pressures in arteries,
veins, venous sinuses & subdural space (Rus))

(BLOOD PRESSURE, determination,
same)

DURINYAN, R.A.; BARTYZEL', A.I.

DB-1-57 stereotaxic apparatus of the Institute of Normal and Pathological Physiology of the Academy of Medicine of the USSR. Biul. eksp. biol. i med. 46 no.12:103-107 D '58. (MIRA 12:1)

1. Iz Instituta normal'noy i patologicheskoy fiziologii (dir. - deystvitel'nyy chlen AMN SSSR V. N. Chernigovsky) AMN SSSR, Moskva. Predstavlena deystvitel'nym chlenom AMN SSSR V.N. Chernigovskim.
(PHYSIOLOGICAL, appar. & instruments,
stereotaxic appar. DB-1-57 (Rus))

DURINYAN, R.A.; BARTIZEL', A.I.

New head holder for cats. Biul. eksp. biol. i med. 49 no.2:121-
122 F '60. (MIRA 14:5)

1. Iz Instituta normal'noy i patologicheskoy fiziologii (dir. -
deystvitel'nyy chlen AMN SSSR V.N.Chernigovskiy) AMN SSSR, Moskva.
Predstavlena deystvitel'nyy chlenom AMN SSSR V.N.Chernigovskim.
(PHYSIOLOGICAL APPARATUS)

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APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000203810004-3"

PADIL, J.; WAL, W.; JANCZYNSKI, W.

From studies on the synthesis and properties of the 2-(4'-pyridyl)-thiazole derivatives,
p. 679. (POCENYKI CHEMII, Warszawa, Vol. 23, no. 4, 1954.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 6, Jun. 1955,
Uncl.

Susko, J.

Susko, J. Studies of the symmetry of aromatic hydrocarbons. V. Mutual equivalence of peripositions in a naphthalene molecule. p. 483.
ROCNIKI CHEM, Warszawa, Vol. 29, no. 2/3, 1955.

(Susko) 18. 1955. 10. 1955.

BARTZ, Z.

H-1

POLAND/Electronics - General

Abs Jour : Ref Zhur - Fizika, No 12, 1958, No 27955

Author : Bartz Zbigniew

Inst : Not Given

Title : Carbon Resistances in the Industry of the Television and
Radio Apparatus.

Orig Pub : Elektrotechnika, 1958, 4, No 3, 59-88

Abstract : The author considers the principal properties and parameters of carbon resistance, the methods for their testing and measurement of their resistance. The most important methods for the manufacture and the technological processes used in Poland and abroad are compared. Ways of development of a domestic industry of carbon resistors are discussed. Bibliography, 11 titles.

Card : 1/1

BARU, A.G.

Replacement of the lower crankshaft of the 2D100 diesel locomotive without the use of a manipulating device. Elek. i tepl. tiaga 5 no.5:23-24 My '61. (MIRA 14:7)

1. Zamestitel' nachal'nika depa C a'zhskoy dorogi po remontu.

(Diesel locomotives--Repairing)
(Crank and crankshafts)

ERLIKH, N.Ya., inzhéner-tekhnolog; SAAKYANTS, T.M.; BARU, A.G.

Efficient method for rebuilding the piston pins of a diesel engine. Elek. i tepl. tiaga no 6:16-18 Je '62. (MIRA 15:7)

1. Dizel'nyy tsekh Tashkentskogo teplovozo-vagono-remontnogo zavoda (for Erlikh).
 2. Starshiy inspektor Glavnogo upravleniya lokomotivnogo khozyaystva Ministerstva putey soobshcheniya na Tashkentskom teplovozo-vagono-remontnom zavode (for Saakyants).
 3. Zamestitel' nachal'nika depo Chu Kazakhskoy dorogi po remontu (for Baru).
- (Diesel locomotives—Maintenance and repair)

BARU, A.M.

USSR/Human and Animal Physiology - Internal Secretion.

V-7

Abs Jour : Ref Zhur - Biol., No 4, 1958, 18429

Author : A.M. Baru

Inst : -

Title : The Influence of Alloxan Diabetes on the Level of Adrenalin
in the Suprarenal Glands of White Rats.

Orig Pub : Probl. endokrinol. i gormonoterapii, 1957, 3, No 3, 46-51

Abstract : The level of adrenalin in the suprarenal glands of rats
with alloxan diabetes decreases (to 0.04--0.06 mg, while
in the controls it was 0.69--1.43 mg) in proportion to
the severity of the diabetes and the general state of the
animals. When the animals were in good condition after
the injection of alloxan, the adrenalin level either cor-
responded to normal or increased slightly.

Iz Kafedry BIOkhimii (zav.-chlen-korrespondent AN USSR prof. A. M.
Utevskiy) Khar'kovskogo meditsinskogo instituta (dir.- dotsent
I. F. Konenko)

Card 1/1

BARU, A.M. (Khar'kov)

Effect of the administration of insulin on the content of adrenalin in the adrenals of rats with alloxan diabetes. Protl, endok. i gorm. 5 no.4:3-7 JI-AE '59. (MIRA 13:2)

1. Iz otdela biokhimii (zav. - chlen-korrespondent Akademii nauk USSR prof. A.M. Utevskiy) Ukrainского instituta eksperimental'noy endokrinologii (dir. - kand.med.nauk S.V. Maksimov) i kafedry biokhimii (zav. A.M. Utevskiy) Khar'kovskogo meditsinskogo instituta (dir. - dotsent I.N. Kononenko).

(INSULIN pharmacol.)
(EPINEPHRINE metab.)
(DIABETES MELLITUS exper.)

OKUN', M.I.; RODKINA, B.S.; BARU, A.M. (Stalino)

Blood protein fractions in pneumoconiosis. Klin.med. 37 no.12:
113-117 D '59. (MIRA 13:4)

1. Iz biokhimicheskoy laboratorii (zaveduyushchiy - kand.biolog.
nauk M.I. Okun') Donetskogo instituta fiziologii truda (direktor -
kand.med.nauk L.B. Zhislin).

(LUNGS--DUST DISEASES)

(BLOOD PROTEINS)

OKUN', M.I.; RODKINA, B.S.; BAHU, A.M.

Investigation of proteins in the lung tissues of rats under normal conditions and following introduction of quartz and coal dust. Ukr.biokhim.shur. 32 no.3:358-367 '60.

(MIRA 13:6)

1. Biochemical Laboratory of the Donets Institute of Labor Physiology, Stalino.

(LUNGS--DUST DISEASES)

(PROTEINS IN THE BODY)

BARU, A.M.; MIL'SHTEYN, A.Ya.

Concentration of ascorbic acid in lungs and other tissues of white rats in experimental silicosis. Ukr. biokhim. zhur. 32 no.5:734-741 '60. (MIRA 14:1)

1. Biokhimicheskaya laboratoriya Donetskogo instituta fiziologii truda, g. Stalino.

(LUNGS--DUST DISEASES)

(ASCORBIC ACID)

BARU, A.M. (Khar'kov)

Amount of sympathomimetic amines in the adrenal glands, heart, liver, kidneys, and cerebrum in white rats both normal and with alloxan diabetes. 14a Probl. endok. i gorm. 8 no.2:48-57
Mr-Apr'62. (MIRA 16:7)

1. Iz otdela biokhimii (zav. -chlen-korrespondent AN UkrSSR prof. A.M. Utevskij) Ukrainskogo instituta eksperimental'noy endokrinologii (dir. kand.med. nauk. S.V.Maksimov) i biokhimicheskoy laboratorii (zav.-dotsent M.I.Okun') Donetskogo instituta fiziologii truda (dir.- kand.med.nauk L.E.Zhislin).
(SYMPATHOMIMETIC SUBSTANCES) (DIABETES)

BARU, A.M.

Study of catechol amines in human urine. Biokhimiia 27 no.2:260-265 Mar-Apr '62. (MIRA 15:8)

1. Laboratory of Biochemistry, the Ukrainian Research Psychoneurological Institute, Kharkov.
(ADRENALINE) (URINE—ANALYSIS AND PATHOLOGY)

UTEVSKIY, A.M.; BARU, A.M., kand.med.nauk

Some aspects of the biochemistry of catechol amines in the physiology
and pathology of the nervous system. Zhur. VKHO 9 no.4:374-380 '64,
(MIRA 17:10)

1. Chlen-korrespondent AN UkrSSR (for Utevskiy).

BARU, A.V.

Method of studying motor digestive conditioned reflexes in birds.
Trudy Inst.fiziol. no.2:449-453 '53. (MLRA 7:5)

1. Laboratoriya sravnitel'noy fiziologii vysshey nervnoy deyatel'nosti
(sveduyushchiy - L.G.Voronin). (Birds--Physiology)
(Conditioned response)

BARU, A.V.

Conditioned inhibition in fowl (chickens and ducks). Trudy Inst.
fiziol. no.2:454-469 '53. (MLRA 7:5)

1. Laboratoriya sravnitel'noy fiziologii vysshey nervnoy deyatel'nosti
(sveduyushchiy - L.G.Voronin). (Birds--Physiology)
(Conditioned response)
(Inhibition)

BARU, A.V.

Motor conditioned responses to chains of stimuli in rabbits. Zhur.
vys.nerv.deiat. 4 no.5:712-723 S-O '54. (MIRA 8:7)

1. Laboratoriya sravnitel'noy fiziologii vysshey nervnoy deyatel'-
nosti Instituta fiziologii im. I.P.Pavlova Akademii nauk SSSR.
(REFLEX, CONDITIONED,
to chain of stimuli in rabbits)

BARU, A.Y.; BOLOTINA, O.P.; KRASUSKAYA, N.A.; LUKINA, Ye.V.; PAVLOV, B.V.;
PRAZDNIKOVA, N.V.; SAF'YANTS, V.I.; CHEBYKIN, D.A.

Material on a study of the dynamics of conditioned reflex activity
of representatives of certain classes of vertebrates. Trudy Inst.
fiziol. 8:99-106 '59. (MIRA 13:5)

1. Laboratoriya sravnitel'noy fiziologii vysshey nervnoy deyatel'-
nosti (zaveduyushchiy - B.V. Pavlov) Instituta fiziologii im. I.P.
Pavlova AN SSSR.

(NERVOUS SYSTEM--VERTEBRATES) (CONDITIONED RESPONSE)